

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
4 August 2005 (04.08.2005)

PCT

(10) International Publication Number  
**WO 2005/071471 A1**

(51) International Patent Classification<sup>7</sup>: G02F 1/133,  
G09F 9/35, 9/33

[CA/CA]; 1612 Birchwood Drive, Mississauga, Ontario  
L5J 1T6 (CA).

(21) International Application Number:  
PCT/CA2005/000050

(74) Agent: **HILL & SCHUMACHER**; 87 Falcon Street,  
Toronto, Ontario M4S2P4 (CA).

(22) International Filing Date: 18 January 2005 (18.01.2005)

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/538,501 26 January 2004 (26.01.2004) US

(71) Applicant (*for all designated States except US*): MCMAS-  
TER UNIVERSITY [CA/CA]; 1280 Main Street West,  
Hamilton, Ontario L8S 4L7 (CA).

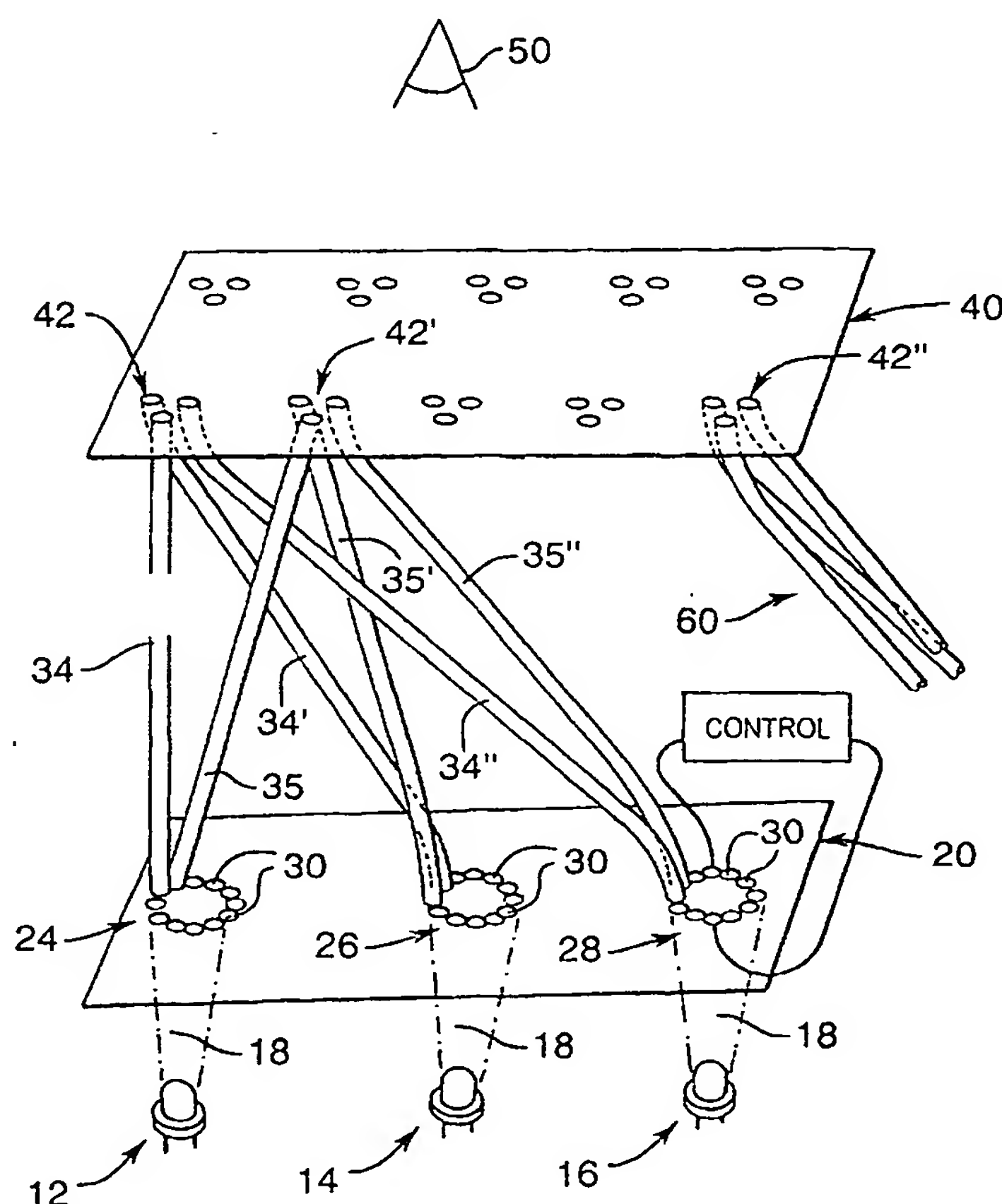
(72) Inventor; and

(75) Inventor/Applicant (*for US only*): KITAI, Adrian

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: TILED OPTICAL FIBER DISPLAY



(57) Abstract: The present invention provides a tiled optical fiber display device structure which includes a light emitting diode (LED) backlit liquid crystal display (LCD). Light from the LCD enters an array of optical fibers that directs the light to a viewing screen. The optical fibers eliminate the use of energy absorbing colour filters in conventional LCD's, and also enable the seamless tiling of multiple display modules.

WO 2005/071471 A1



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

**Published:**

— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*